

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
13 October 2005 (13.10.2005)

PCT

(10) International Publication Number
WO 2005/095462 A1

(51) International Patent Classification⁷: C08B 37/00, C08G 18/64, A61K 7/48

(74) Agent: OHIE, Kunihisa; Ohie Patent Office, Selva-Ningyocho 6F, 14-6, Nihonbashi-Ningyocho, 2-chome, Chuo-ku, Tokyo 103-0013 (JP).

(21) International Application Number:

PCT/IP2005/006406

(22) International Filing Date: 25 March 2005 (25.03.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
2004-105931 31 March 2004 (31.03.2004) JP
60/560,605 9 April 2004 (09.04.2004) US

(71) Applicant (for all designated States except US): SHOWA DENKO K.K. [JP/JP]; 13-9, Shiba Daimon, 1-chome, Minato-ku, Tokyo 105-8518 (JP).

(72) Inventors; and

(75) Inventors/Applicants (for US only): KAMACHI, Motoaki [JP/JP]; c/o Showa Denko K.K., 5-1, Ogimachi, Kawasaki-ku, Kawasaki-shi, Kanagawa, 210-0867 (JP). KAKUCHI, Toyoji [JP/JP]; 2-1-8-206, Makomanai Isumimachi, Minami-ku, Sapporo-shi, Hokkaido 005-0015 (JP). SATOH, Toshifumi [JP/JP]; 10-1-41-110, Hachiken-gojounishi, Nishi-ku, Sapporo-shi, Hokkaido 063-0845 (JP).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

WO 2005/095462 A1

(54) Title: MOISTURE RETENTION POLYMER COMPOUND

(57) Abstract: The present invention relates to (1) a moisture retention polymer compound comprising a structural unit including a multi-branched polysaccharide derivative in which the hydroxyl group (OH) may be substituted by OR wherein R represents a hydrogen atom, a hydrocarbon having 1 to 30 carbon atoms, or a hydrocarbon having 1 to 30 carbon atoms and a hetero atom, and a structural unit without a multi-branched polysaccharide derivative, (2) an external preparation for skin comprising 0.1 to 99.9 % by mass of the polymer compound, which can provide moist feeling to the skin and exhibit an appropriate viscosity and solubility, and (3) a cosmetic product comprising the external preparation for skin.